REMARKS

In the Office Action, the Examiner rejected the claims under 35 USC §102 and 35 USC §103. The rejections are fully traversed below. The claims have been amended to correct minor informalities and to further clarify the subject matter regarded as the invention. Claims 1-51 and 65-89 remain pending.

Reconsideration of the application is respectfully requested based on the following remarks.

REJECTION OF CLAIMS UNDER 35 USC §102

In the Office Action, the Examiner has rejected claims 18 and 19 under 35 USC §102 as being anticipated by Sarkar, U.S. Patent No. 6,418,448 B1, ('Sarkar' hereinafter). This rejection is fully traversed below

The Examiner refers to FIGs. 4-6, which merely shows relational databases. Moreover, while the Examiner refers to FIGs. 11 and 13, FIG. 11 merely shows object definitions, while FIG. 13 shows methods and object SQL queries. In no manner does Sarkar disclose a representation for query results such as that claimed. More particularly, Applicant respectfully asserts that Sarkar fails to disclose or suggest a data structure for representing results of a query in a canonical format, the format being expressed in XML, where the data structure is a "table element having one or more row elements and one or more columns; for each of the one or more row elements, one or more data elements, each data element corresponding to one of the one or more columns of the table element; and each data element having one or more values or table elements with row elements and data elements." Accordingly, Applicant respectfully submits that claims 18 and 19 are patentable over Sarkar.

REJECTION OF CLAIMS UNDER 35 USC §103

In the Office Action, the Examiner has rejected the claims under 35 USC §103 as being unpatentable over Yalcinalp, U.S. Patent No. 6,507,857, ('Yalcinalp' hereinafter) in view of Sarkar, U.S. Patent No. 6,418,448 B1, ('Sarkar' hereinafter). This rejection is fully traversed below.

Various embodiments of the invention are directed to a mechanism for encapsulating a query definition that includes a query specification (i.e., query text and parameters), a data source identifier, and a transform. This is accomplished by encapsulating the query definition in a data structure. This enables various users to be provided with a data structure including a copy of the query definition. A user can request execution of their copy of the

query definition. During execution, the user may be requested to specify values for the parameters. The query text, along with the values for the parameters, are used to query the data source identified by the data source identifier. The parameters can specify portions of the query text that can be changed by a user before the query is executed. The results of the query are then transformed based on the transform of the query definition. Applicants' technique thus provides a way for queries to be encapsulated so that query text, parameters, a data source, and a transform can all be described in a data structure (e.g., file) that can be provided to users.

Claims 1-10 and 65-76 are directed to a data structure encapsulating a query definition that includes a query specification with query text and parameters, a data source identifier, and a transform. Claims 11-17, 20-26, 35-51, and 77-89 are directed to executing a query defined in a query specification against a data source that is identified in the query specification. Claims 18-19 are directed to a data structure for representing results of a query in a canonical format.

It is important to note that none of the cited references, separately or in combination, discloses or suggests encapsulating a query definition in a data structure, enabling the data structure to be copied or transmitted and therefore enabling the same query definition to be executed by multiple application programs. None of the cited references, separately or in combination, discloses or suggests encapsulating a query definition in a data structure in any manner.

There are numerous advantages to encapsulating a query definition in a data structure. For instance, encapsulating a query definition in a data structure enables the data structure to be copied and sent to multiple application programs. Moreover, the user may specify values for the parameters of the query definition before or when the query definition is executed, enabling the user to customize the query definition. None of the cited references, separately or in combination, discloses or suggests such advantages.

Yalcinalp describes a system in which a user issues a document request, and an XSLT processor transforms the document in accordance with a style sheet that is associated with the document. The transformed document is then sent to the user. The style sheet may specify a method of a component external to the style sheet. The XSLT processor initiates the execution of the method and may pass arguments that are defined in the style sheet. The

XSLT processor then incorporates results of the executed method into the transformed document before sending it to the user.

It is important to note that in Yalcinalp, the document identifier is presumably received from a user, not retrieved from or stored in a data structure. Moreover, Yalcinalp fails to disclose or suggest the setting of parameter values by users. Rather, Yalcinalp's parameter values are stored in a style sheet and retrieved when a method of the external component is invoked. As such, Applicant respectfully submits that Yalcinalp teaches away from the claimed invention.

Sarkar does disclose JAVA classes. However, the combination of the cited references fails to teach or suggest encapsulating query text, parameters, a results transform, and a data source identifier in a single data structure. The Examiner further refers to Figure 5, which merely shows an object relational database schema definition. The Examiner further cites column 7, lines 34-44 "various parameters may be associated with the component." However, Applicant was unable to locate such a reference. Accordingly, Applicant respectfully submits that the combination of the cited references would fail to achieve the desired result.

It is also important to note that none of the cited references, separately or in combination, discloses or suggests transmitting or receiving a data structure encapsulating such a query definition, as recited in claims 20 and 45. As set forth above, the cited references fail to disclose or suggest the advantages of sending such a data structure.
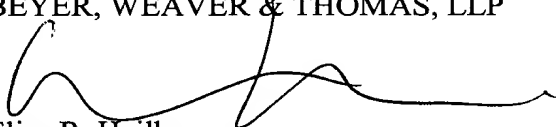
In view of the above, Applicants respectfully submit that the claims, as amended, further clarify the subject matter regarded as the invention. The dependent claims depend from one of the independent claims and are therefore patentable for at least the same reasons. However, the dependent claims recite additional limitations that further distinguish them from the cited references. The additional limitations recited in the independent claims or the dependent claims are not further discussed, as the above discussed limitations are clearly sufficient to distinguish the claimed invention from the cited references. Thus, it is respectfully requested that the Examiner withdraw the rejection of the claims under 35 USC §103(a).

SUMMARY

If there are any issues remaining which the Examiner believes could be resolved through either a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

Applicants hereby petition for an extension of time which may be required to maintain the pendency of this case, and any required fee for such extension or any further fee required in connection with the filing of this Amendment is to be charged to Deposit Account No. 50-0388 (Order No. ACTUP009).

Respectfully submitted,
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